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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/517,402	12/07/2004	Christopher J. Criscuolo	2832 (203-3308)	4034	
Covidien	7590 02/18/2009		EXAMINER		
60 Middletown			DANG, PHONG SON H		
North Haven, C	1 004/3		ART UNIT	PAPER NUMBER	
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			02/18/2009	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applicat	tion No.	Applicant(s)			
		10/517,4	402	CRISCUOLO ET AL.			
		Examine	er	Art Unit			
		SON DA	NG	3773			
 Period for	The MAILING DATE of this commun	ication appears on ti	he cover sheet with the	correspondence ad	ddress		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
2a)⊠ 1 3)□ S	Responsive to communication(s) file This action is <b>FINAL</b> . Since this application is in condition closed in accordance with the practi	2b)∏ This action is for allowance excep	non-final. ot for formal matters, p		e merits is		
Dispositio	n of Claims						
4 5)□ ( 6)⊠ ( 7)□ ( 8)□ ( <b>Applicatio</b> 9)□ T	he specification is objected to by th	re withdrawn from consister is is are rejected. Setion and/or election to the Examiner.	onsideration.	tod to by the Even	inor		
<ul> <li>10) ☐ The drawing(s) filed on 28 February 2007 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.         Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).         Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>							
Priority ur	nder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2)  Notice 3)  Informa	s) of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (Fation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date <u>See Continuation Sheet</u> .	PTO-948)	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:				

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :08/11/2008, 09/23/2008, 01/05/2009.

Application/Control Number: 10/517,402 Page 2

Art Unit: 3773

#### **DETAILED ACTION**

1. The Amendment filed 07/02/2008 has been entered. Claims 45-47 have been added. Claims 21, 23-28, 32-36 and 40-47 are pending in the application.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 21, 23-24, 27, 32-36 and 40-47 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,001,101 to Augagneur et al. (Augagneur).

  In Reference to Claims 21-24, 27, 32-36 and 40-47:

  Augagneur teaches:

A surgical tack for attaching a material to tissue comprising: a head (2, Fig. 1) having a drive thread (20, Fig. 1) formed on an outer surface thereof, the drive thread (20, Fig. 1) being one of a right-hand thread or left-hand thread (Fig. 1); a barrel portion (1, Fig. 1) extending from the head (2, Fig. 1) and having a tissue engaging thread (10, Fig. 1) formed on an outer surface thereof and extending substantially along an entire length of the barrel portion (1, Fig. 1), wherein a distal end of the drive thread (20, Fig. 1) and a proximal end of the tissue engaging thread (10, Fig. 1) define a gap (3, Fig. 1) there between, the tissue engaging thread (10, Fig. 1) having the same right-hand or left-hand thread as the drive thread (Fig. 1), wherein the proximal end of the tissue

Application/Control Number: 10/517,402

Page 3

Art Unit: 3773

engaging thread (10, Fig. 1) is in the same plane as the distal end of the drive thread (20, Fig. 1) and the plane is substantially transverse (transverse define broadly is extending or lying across or in a crosswise direction) to a longitudinal axis of the barrel portion (1, Fig. 1); and a through bore (30, Fig. 2) extending through the head (2, Fig. 1) and barrel portion (1, Fig. 1) for receipt of a drive tool. A transition zone between the drive thread (20, Fig. 1) and the tissue engaging thread (10, Fig. 1). A leading edge of the drive thread is tapered (23, Fig. 1). The maximum diameter of the drive thread (2, Fig. 1) is greater than the maximum diameter of the tissue engaging thread (10, Fig. 1). The barrel portion (1, Fig. 1) includes a smooth or rounded leading edge. The head (2, Fig. 1) is configured to facilitate removal of the tack. The drive thread (20, Fig. 1) and the tissue engaging thread (10, Fig. 1) have substantially the same pitch. A surgical tack comprising: a head (2, Fig. 1) having a first thread (20, Fig. 1) formed thereon; a barrel portion (1, Fig. 1) extending from the head, the barrel portion having a second thread (10, Fig. 1) extending substantially along an entire length thereof, the first and second threads being formed in the same right-hand or left hand direction, wherein a leading edge of the first thread (20, Fig. 1) and a trailing edge of the second thread (10, Fig. 1) are spaced apart thereby defining a discontinuity (3, Fig. 1) there between, the leading edge of the first thread (20, Fig. 1) and the trailing edge of the second thread (10, Fig. 1) are both in a common plane, the common plane extends through a longitudinal axis of the barrel portion (1, Fig. 1); and a through bore (30, Fig. 2) extending through the

Application/Control Number: 10/517,402 Page 4

Art Unit: 3773

tack for receipt of a drive tool. The drive thread (20, Fig. 1) forms an incomplete convolution about the head (2, Fig. 1).

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augagneur in view of US Patent No. 5,169,400 to Muhling (Muhling).

  Augagneur teaches:

The surgical tack as recited in claim 21 (see rejection of claim 21 above).

Augagneur fails to teach:

The through bore has a D-shaped cross-section.

Muhling teaches:

The through bore has a D-shaped cross-section (Figs. 2-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the D-shaped through bore into Augagneur in order to enhance the torque to be applied to the screw.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Augagneur in view of Huebner (U.S. Patent No. 6,030,162). Augagneur does not disclose a chamfered leading edge of the drive thread. Huebner does not appear to expressly disclose a chamfered drive thread on the head portion 26. However, Huebner

Page 5

does disclose a chamfer 80 on the leading section 24 (.See Huebner figure 2; Huebner, col. 4, 63-65). Huebner also discloses, "[the] termination zone 80 [or chamfered portion] could be used on any of the screws described herein." Huebner, col. 5, lines 6-7. This implies that the chamfered portion can be used on the trailing head portion 26. It would be obvious to apply a chamfered portion, as taught by Huebner, on the head portion of Augagneur so as to allow for smooth rotation through and insertion into shaft 146.

### Response to Arguments

7. Applicant's arguments with respect to claims 21, 23-28, 32-36, 40-44 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/517,402 Page 6

Art Unit: 3773

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON DANG whose telephone number is (571)270-5809. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on 571-272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SD

/(Jackie) Tan-Uyen T. Ho/ Supervisory Patent Examiner, Art Unit 3773